

REMARKS

Applicants have amended claims 1 to 4, 7 and 8 in view of the outstanding rejection. Applicants respectfully request reconsideration in view of the amendment and the following remarks.

In particular, Applicants have amended claim 1 to include the thermoplastic polymer being polyvinyl alcohol. The specification at paragraph 12 provides a basis for the limitation. In addition, claim 1 now includes the broad ranges for the corrosion inhibitor, complexing agent, oxidizing agent and abrasive. The specification, in paragraphs 25, 27, 23 and 22, respectively, provides a basis for the limitations. Furthermore, claims 1, 7 and 8 now include "wherein increasing the weight ratio of the polyvinyl alcohol to the polyvinylpyrrolidone decreases the removal rate of the non-ferrous interconnect" for increased specificity—Table 2 and paragraph 36 provide a basis for the amendment. In addition, claim 2 now includes the polyvinylpyrrolidone weight average molecular weight of 1,000 to 250,000 g/mole as supported by paragraph 14 of Applicants' specification. Claim 3 limits the abrasive to silica, as supported by paragraph 20 of Applicants' specification. Claim 7 now includes expanded polyvinyl alcohol and polyvinylpyrrolidone ranges supported by paragraphs 11 and 14, respectively. Finally, claim 8 now includes the composition limitations of amended claim 1. Applicants respectfully submit that the amendments enter no new matter.

The action rejects claims 1 to 10 over Tsuchiya et al. (U.S. Pat. Pub. No. 2002/0095872) in view of Kurata et al. (U.S. Pat. Pub. No. 2003/0219982). Tsuchiya et al. disclose a thickener in an amount of 0.001 to 0.05 wt% polyvinylpyrrolidone or polyvinyl alcohol, but fail to disclose the benefits achieved with a combination of polyvinylpyrrolidone and polyvinyl alcohol. In addition, Kurata et al. teach the use of polyvinyl alcohol as an etching suppressant, but fail to

disclose the benefits achieved with a combination of polyvinylpyrrolidone and polyvinyl alcohol. Furthermore, Table 1 teaches that polyvinyl alcohol increases copper removal rate. Applicants have amended the claims to reflect that increasing the weight ratio of the polyvinyl alcohol to the polyvinylpyrrolidone decreases the removal rate of the non-ferrous interconnect. Thus, since Kurata et al. teach that polyvinyl alcohol increases removal rate, it teaches away from Applicants claimed composition where increasing PVA decreases interconnect removal rate. Applicants respectfully submit that since the references fail to disclose the benefits achieved with a combination of polyvinylpyrrolidone and polyvinyl alcohol and Kurata et al. teach away from using polyvinyl alcohol to reduce interconnect removal rate, claims 1 to 10, as amended, are not obvious in view of the combined references.

Claim 2—Tsuchiya et al. disclose an overlapping polyvinylpyrrolidone range, but not with the claimed combination of polyvinylpyrrolidone and polyvinyl alcohol.

Claim 3—Tsuchiya et al. disclose silica, but not with the claimed combination of polyvinylpyrrolidone and polyvinyl alcohol.

Claim 4—Kurata et al. disclose an overlapping polyvinyl alcohol range, but not with the claimed combination of polyvinylpyrrolidone and polyvinyl alcohol.

Claim 5—Tsuchiya et al. disclose an overlapping polyvinylpyrrolidone range, but not with the claimed combination of polyvinylpyrrolidone and polyvinyl alcohol.

Claim 6—the combined references do not teach or suggest the claimed ratio of polyvinylpyrrolidone to polyvinyl alcohol.

Claim 7—see arguments to amended claim 1.

Claim 8—the combined references fail to disclose the benefits achieved with a combination of polyvinylpyrrolidone and polyvinyl alcohol and teach away from using polyvinyl alcohol to reduce interconnect removal rate.

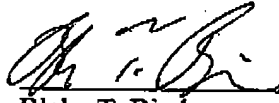
Claim 9—Kurata et al. disclose polishing with a low dielectric rate, but not with the claimed combination of polyvinylpyrrolidone and polyvinyl alcohol.

Claim 10—Tsuchiya et al. disclose polishing with a high removal rate for copper and they do disclose the claimed combination of polyvinylpyrrolidone and polyvinyl alcohol.

Applicants respectfully submit that the application is in condition for allowance and request reconsideration. If a telephone call would expedite prosecution, please call me at (302) 283-2136.

Respectfully submitted,

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